

Application No. 10/635,647  
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**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1 (original): A field emission device (FED) comprising:

- a substrate;
- a cathode formed over the substrate;
- micro-tips having nano-sized surface features, formed on the cathode;
- a gate insulation layer with wells each of which a single micro-tip is located in, the gate insulation layer formed over the substrate;
- a gate electrode with gates aligned with the wells such that each of the micro-tips is exposed through a corresponding gate, the gate electrode formed on the gate insulation layer;
- a focus gate insulation layer having openings each of which one or more gates correspond to, the focus gate insulation layer formed on the gate electrode; and
- a focus gate electrode with focus gates aligned with the openings of the focus gate insulation layer, the focus gate electrode formed on the focus gate insulation layer.

Claim 2 (original): The field emission device of claim 1, wherein a resistor layer is formed over or beneath the cathode, or a resistor layers is formed over and beneath the cathode.

Claim 3 (new): The field emission device of claim 1, wherein the micro-tips having nano-sized surface features comprise a plurality of nano-tips.

Claim 4 (new): The field emission device of claim 1, wherein a resistor layer is formed beneath the cathode.

Claim 5 (new): The field emission device of claim 1, where in resistor layers are formed over and beneath the cathode.